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GenCore version 5.1.6 (c) 1993 - 2004 Compugen

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Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Issued_Patents_AA:*
1: /cgm2_6/ptodata/2
2: /cgm2_6/ptodata/2
3: /cgm2_6/ptodata/2
4: /cgm2_6/ptodata/2
5: /cgm2_6/ptodata/2
6: /cgm2_6/ptodata/2

Total number

of hits satisfying chosen parameters:

389414 seqs, 51625971

Gapop 10.0 , BLOSUM62

Gapext 0.

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
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Sequence 15, Appl
Sequence 5086, Ap
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Sequence 11, Appl
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Sequence 11, Appl
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Sequence 8, Appli
Sequence 8, Appli
Sequence 8, Appli
Sequence 8, Appli
Sequence 55, Appli
Sequence 57, Appli
Sequence 5133, Ap
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Sequence 512, Appli
Sequence 51, Appli
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Patent No. 6503744

GENERAL INFORMATION:
APPLICANT: Gilbert, Michel
APPLICANT: Wakarchuk, Warren W.
APPLICANT: Wakarchuk, Warren Glycosyltransferases for TITLE OF INVENTION: Campylobacter Glycosyltransferases for TITLE OF INVENTION: Gangliosides and Ganglioside Mimics
FILE REFERENCE: 019433-000110US
CURRENT APPLICATION NUMBER: US/09/495,406
CURRENT FILING DATE: 2000-01-31
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR FILING DATE: 1999-02-01

NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 15
SEQ ID NO 15
CORGANISM: Campylobacter jejuni
US-09-495-406-15
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                                                                                                                                                                                                                                                                                                                                                                                                                              63 HNEKNIGILRARYEGVKVANSPYIMFIDPDDYLEINACEECIKIIDEQD-EVDLVFFNAI
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                                                    LINDINILVLKL
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                                                                                                              KNEVLVKNNIQELQLVLNYLRQNYILNKYC---SVLYVLIKYLLYIQIYKIKRTKLMVTL
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28.2%; Pred. No. 1.3e-13;
tive 53; Mismatches 135
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US-08-683-458-5
US-08-683-458-12
US-08-878-360-5
US-08-878-360-5
US-08-878-1408-5
US-09-333-412-12
US-09-333-412-12
US-09-107-532A-6889
US-09-107-532A-4568
US-09-437-277-1
US-09-597-236-10
US-08-597-236-10
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Result

Length

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US-09-495-406-15
US-09-134-000C-5086
US-09-134-000C-5086
US-08-312-387B-3
US-08-683-426-13
US-08-683-426-13
US-08-683-458-3
US-08-683-458-3
US-08-683-458-3
US-08-878-360-33
US-08-878-140B-3
US-08-478-140B-3
US-08-478-140B-3
US-09-333-412-3
US-09-333-412-3
US-09-338-943-3
US-09-338-943-3
US-09-338-943-3
US-09-107-532A-5123
US-09-107-532A-6181

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RESULT 3
US-09-134-000C-5086
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; SOFTWARE: PatentIn version 3.1; SEQ ID NO 5087; LENGTH: 534; TYPE: PRT ORGANISM: Enterococcus faecalis US-09-134-000C-5087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
US-09-134-000C-5087
US-09-134-000C-5086
                                                                                APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
TITLE OF INVENTION: ENTEROCOCCUS FAECALIS FOR DIAGNOSTICS AND THERAPBUTICS
FILE REFERENCE: 032796-032
CURRENT FILING DATE: 1998-08-13
FRIOR APPLICATION NUMBER: US 60/055,778
PRIOR APPLICATION NUMBER: US 60/055,778
PRIOR FILING DATE: 1997-08-15
NUMBER OF SEQ ID NOS: 6812
SOFTWARE: Batentin version 3.1
SEQ ID NO 5086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No. 6bi.
                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                               Sequence 5086, Application US/09134000C Patent No. 6617156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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PRIOR FILING DATE: 1997-08-15
NUMBER OF SEQ ID NOS: 6812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO TITLE OF INVENTION: ENTERCOCCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: 032796-032
CURRENT APPLICATION NUMBER: US/09/134,000C
CURRENT FILING DATE: 1998-08-13
                     ORGANISM: Enterococcus faecalis
                                                               ENGTH: 1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   485 ---- IMADNGSTDPXMHE-LYAEFEQQLPGRFFVESIDI 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316 IDMDGN-----RSDPAFKPDWSPDLLLGTNYISH-LGVYRRSILEEIGGFRKGYEGSQD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                429 NGHATHGAANGLYDVYYDIESEKLVSIIIPTKNGYKDVQRCVSSIIE----KTTYQNYEI-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 182 YDFAIRGALADFK--IGLLNKVLLQYRLNENGISQTNKFKQYIYSA-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          256 FREQNGHISEATNSALATATGEFVALLDNDDELAINAFYEVVKVLNENPELDLIYSDEDK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          %; Score 216; DB 4; Length 534;%; Pred. No. 1.3e-11;64; Mismatches 138; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            58;
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RESULT 4
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                                                                                                                                                 ; MOLECULE TYPE: protein US-08-312-387B-3
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Best Local S
                                                                                                             Query Match
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COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/312,387B
FILING DATE: U14/7, 1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 348 amino acids
TYPE: amino acid
TOPOLOGY: linear
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APPLICANT: Gotsch
                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 201 487-5800
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                     NAME: Jackson Esq., David A. REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600
                                                                                                                                                                                                                                                                                                   TELEFAX: 201 343-1684
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No. 5545553
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                                                                      Similarity 27.8
86; Conservative
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                                SIIMSVYNEPLNYVRDSVESILNOTLTDFEFITVIDNESRGDLKQFLTEYSVVDNRIKIL 63
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SVLICAYNVE-KYFAQSLAAVVNQTWRNLDILIVDDGSTDGTL-AIAKDFQKRDSRIKILL
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411 Hackensack Avenue
                                                                                      13.2%;
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GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS
OLIGOSACCHARIDES, AND GENES ENCODING I
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                                                                      Score 210.5; DB 1;
Pred. No. 2.3e-11;
55; Mismatches 123;
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US-08-312-387B-11
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Best Local S
Matches 86
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                                                                                                                                                                                                                                                                                                                                    NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKST NUMBER: 600-1-095
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS TITLE OF INVENTION: OLIGOSACCHARIDES, AND GENES ENCODING NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08
FILING DATE: July 7, 1994
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MEDIUM TYPE: Floppy
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                        MOLECULE TYPE:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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                                                                                                                                                                                                                        TOPOLOGY:
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64 INBENIGLASSINKAV-KISK-----GEYIFRMDADDISYPSRFDKQIRFMEENS--LDF 115
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                                                                                                                                         Similarity
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                                                                                                                        Score 210.5; DB 1;
Pred. No. 2.3e-11;
5; Mismatches 123;
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US-08-683-426-3
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Best Local :
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APPLICANT: Gotsch
                                                                                                                                                                                                                TELEX: 133521
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 0
FILING DATE: Septembe
CLASSIFICATION: 536
                                                                                                               Type: Type: protein
                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 26,742

REFERENCE/DOCKET NUMBER: 600-1-095B

TELECOMMUNICATION INFORMATION:
TELEPAN: 201 487-5800
TELEFAN: 201 343-1684
TELEX: 133571
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA;
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 348 amino acid
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TELEFAX: 133521
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                                                           Local Similarity 27.8
                                                                                                                                                                                                                                                                                                           NAME: Jackson Esq., David A. REGISTRATION NUMBER: 26,742
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                          4 SIIMSVYNEPLNYVRDSVESILNQTLTDFEFIIVIDNPSRGDLKQFLTEYSVVDNRIKIL
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                                                                                                                                                                 : 348 amino acids amino acid
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SVLICAYNVE-KYFAQSLAAVVNQTWRNLDILIVDDGSTDGTL-AIAKDFQKRDSRIKIL
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GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS
OLIGOSACCHARIDES, AND GENES ENCODING T
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Pred. No. 2.3e-11;
                                                               Mismatches
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US-08-683-426-11
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                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 348 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-683-426-11
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Patent No. 5705367
GENERAL INFORMATION:
                                                                            Matches
                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                      TELEX: 133521
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                   NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
TELEFAX: 201 343-1684
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TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
TITLE OF INVENTION: OLIGOSACCHARIDES, AND GENES ENCODING THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 536
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: Septem CLASSIFICATION: 536
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CITY: Hackensack
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5705367
                                                                                              Similarity
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                                       SIIMSVYNEPLNYVRDSVESILNQTLTDFEFIIVIDNPSRGDLKQFLTEYSVVDNRIKIL 63
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  SVLICAYNVE-KYFAQSLAAVVNQTWRNLDILIVDDGSTDGTL-AIAKDFQKRDSRIKIL 63
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                                                                            13.2%; Score 210.5; DB 1; 27.8%; Pred. No. 2.3e-11; tive 55; Mismatches 123;
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                                                                                                                 Length 348;
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US-08-683-458-3
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Patent No. 5798233
GENERAL INFORMATION:
                                                                  Matches
                                                                                Query Match
Best Local
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                                                                                                                                                 TYPE: amino acids
TOPOLOGY: line
GOLECTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0,
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                NAME: Jackson Esq., David A. REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
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COUNTRY:
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CLASSIFICATION:
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                                4 SIIMSVYNEPLNYVRDSVESILNOTLTDFEFIIVIDNPSRGDLKQFLTEYSVVDNRIKIL
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                                                                                  Similarity
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VENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF VENTION: OLIGOSACCHARIDES, AND GENES ENCODING THEM
                                                                                                                                                                                                                                                                     201 343-1684
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                                                                    Conservative
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                                                                  13.2%; Score 210.5; DB 1; 27.8%; Pred. No. 2.3e-11; tive 55; Mismatches 123;
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                                                                                                  Length 348;
                                                                     Indels
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US-08-683-458-11
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                                                                                                                               ; MOLECULE TYPE: protein US-08-683-458-11
                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 348 amin -
Type
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Patent No. 5798233
GENERAL INFORMATION:
                                                         Matches
                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 00
FILING DATE: September
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC Compatible
ODERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/683,458
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                   NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-095A
                                                                                                                                                                      TOPOLOGY:
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                                                         96;
4 SIIMSVYNEPLNYVRDSVESILNQTLTDFEFIIVIDNPSRGDLKQFLTEYSVVDNRIKIL
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                                                                         13.2%; Score 210.5; 27.8%; Pred. No. 2.3
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                                                       ore 210.5; DB 1;
ed. No. 2.3e-11;
Mismatches 123;
                                                                                           Length 348;
                                                         Indels 45;
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Query Match
Best Local Similarity
Matches 86; Conserv
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APPLICANT: Gotsch
                                                                                                                                                              TELEX: 133521
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US
FILING DATE: 18-JUN-15
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 08/3:
FILING DATE: September 2
FILING DATE: September 2
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                          TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                      REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
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TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS
TITLE OF INVENTION: OLIGOSACCHARIDES, AND GENES ENCODING T
                                                                                                                                                                                                     TELEPHONE: 201 -- TELEPHONE: 201 343-1684
                                                                                                                                                                                                                                                                                        NAME: Jackson Esq., David A. REGISTRATION NUMBER: 26,742
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                                                                                                                                               LENGTH:
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TATE: New Jersey
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          124 GAWLEVLSEEKDGNRLARHHKHGKIWKKPTRHEDIAAFFPFGNPIHNNTMIMRRSVIDGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       287 RRFLYQCFK 295
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                                                                                                                           : 348 amino acids
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18-JUN-1997
                     13.2%;
27.8%;
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mber 26, 1994
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 Score 210.5; DB 2
Pred. No. 2.3e-11;
5; Mismatches 123
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                                    DB 2;
     123;
                                      Length 348;
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Patent No. 5945322
GENERAL INFORMATION:
                                                                               TELEFAX: 201 343-1684
TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                    NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-095B
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
TELEPAX: 201 343-1684
TELEPAX: 201 343-1684
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PRIOR APPLICATION NUMBER: (
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/878,360
FILING DATE: 18-JUN-1997
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MEDIUM TYPE: Floppy
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TITLE OF INVENTION: GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
TITLE OF INVENTION: OLIGOSACCHARIDES, AND GENES ENCODING THEM
MOLECULE TYPE: protein
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APPLICATION NUMBER:
FILING DATE: September CLASSIFICATION: 435
      TYPE: amino acids
TOPOLOGY: line
LECTOR
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                                                                                                                                                                                                                                                                                                          September 26, 1994
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US-08-478-140B-3
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US-08-478-140B-3
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GENERAL INFORMATION:
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                                                                                                                  TELEX: 66141 PENNIE
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 348 amino acids
                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/478
FILING DATE: 07-UN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Laura A. Coruzzi
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7188
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: JOHNSON
APPLICANT: ROTH, STI
APPLICANT: BUCZALA,
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS
                                 TOPOLOGY: 1 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                       TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Pennie & STREET: 1155 Avenue
                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 287 RRFLYQCFK 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      235
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              171
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                116 SATLIELIDOK-GULVYKORESUKIYLT----NDIRKMLLURSILAHPTWCVKKKVFDKL 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64 AQAQNSGLIPSLNIGLDELAKSGGGGGEYIARTDADDIASPGWIEKIVGEMEKDRSIIAM 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64 LNEENIGLASSINKAV-KISK-----GEYIFRMDADDISYPSRFDKQIRFMEENS--LDF 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86
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                                                                                                                                                                                                                                                                              (212) 869-9741/8864
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BUCZALA, STEPHANIE TA.

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of the /
                                                                                                                                                                                                                                                                                                                                                                                  7188-017
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US-08-478-140B-8
                                                        NAME: Laura A. Coruzzi
REGISTRATION NUTWER: 30,742
REFERENCE/DOCKET NUTWER: 7188
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPAX: (212) 869-9741/8864
TELEX: 66141 ENNIE
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 348 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 8, Appl:
Patent No. 612719
GENERAL INFORMAC
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Best Local Similarity 27.8
Matches 86; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 10036-2711

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COPERATING SYSTEM: PC-DOS/MS-DOS

SOFTMARE: Patentin Release #1.0, Version #1

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/478,140B

FILING DATE: 07-JUN-1995

CLASSIFICATION: 435

CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: BUCZALA, ITITLE OF INVENTION: ITITLE OF INVENTION: ITITLE OF INVENTION: ITITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: New York
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STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     287 RRFLYQCFK 295
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 SIIMSVYNEPLNYVRDSVESILNQTLTDFEFIIVIDNPSRGDLKQFLTEYSVVDNRIKIL 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , Application US/08478140B 6127153
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                          amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: Pennie & Edmonds
1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
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VENTION: METHOD OF TRANSFERRING AT LEAST TWO
VENTION: SACCHARIDE UNITS WITH A POLYGLYCOSYLTRANSFERASE,
VENTION: POLYGLYCOSYLTRANSFERASE AND GENE ENCODING A
VENTION: POLYGLYCOSYLTRANSFERASE
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double
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; ANTI-SENSE: NO
US-08-478-140B-8
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US-09-333-412-3
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Best Local Similarity 27.8
Matches 86; Conservative
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Patent No. 6342382
PATENT INFORMATION:
GENERAL INFORMATION:
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                                 INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/333,412
FILING DATE: 15-Jun-199
CLASSIFICATION: Junknown>
                                                                                                                                                                NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-095
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/312,387
FILING DATE: July 7, 1994
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ADDRESSEE: Klauber & Jackson
STREET: 411 Hackensack Avenu
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STATE: New Jersey
                                                                                                                                          TELEFAX: 201 343-1684
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MOLECULE TYPE: protein
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SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-333-412-3
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US-09-333-412-11
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Patent No. 6342382
GENERAL INFORMATION:
APPLICANT: Gotschlich, Emil C
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Best Local
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INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS: LENGTH: 348 amino acids
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                                                                                                         NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-095
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201 487-5800
                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/312,387
FILING DATE: July 7, 1994
ATTORNEY/AGENT INFORMATION:
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ADDRESSEE: Klauber & Jackson
STREET: 411 Hackensack Avenue
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/333,412 FILING DATE: 15-Jun-1999 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, ENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: New Jersey COUNTRY: USA
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                                                                                         TELEFAX:
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GLYCOSYLTRANSFERASES FOR BIOSYNTHESIS OF
colorosaccharides, and genes encoding them
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TOPOLOGY: linear

HOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQ
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Best Local Similarity 27.8%;
Matches 86; Conservative 5
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                                               278 YICLYLYFK
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287 RRFLYQCFK 295
                                                                                                                                  224 SAILQDFYKEKSYIDITKITNYFQEYVIKKRYT----QQELSKYFEL--KSTPSITIRKL 277
                                                                                                                                                                                                                                                                                                                                                            64 AQAQNSGLIPSINIGLDELAKSGGGGGYTARTDADDIASPGWIEKIVGEMEKDRSITAM 123
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                                                                                                                                                                                                                          MGY---RDIVPVEDYDF----AIRGALADFKIGLLNKVLLQYRLNENGISQTNKFKQYIY 223
                                                                                                                                                                                                                                                                                                               SATLIBLIDOX-GNLVYKORESNKIYLT----NDIRKMLLNRSILAHPTWCVKKKVFDKL 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SVLICAYNVE-KYFAQSLAAVVNQTWRNLDILIVDDGSTDGTL-AIAKDFQKRDSRIKIL
                                                                                                                                                                               LRYDTERDW--AEDYQFWYDVSKLGRLAYYP---
                                                                                          -EIAQGIQK-----TARNDFLQSMGFKTRFDSLEYRQTKAAAYELPEKDLPEEDFERA 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         b; Score 210.5; DB 4;
b; Pred. No. 2.3e-11;
55; Mismatches 123;
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Search completed: March 24, 2004, 22:36:34
Job time : 23 secs

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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DRMATION: n equals a,
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MATION: n equals a,
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맑 Š 밁 Ş Matches Query Match Best Local Similarity 475693 475813 17 77 ATCAPACATYTABAGATTTTGAMTTTATAATCGYYTTAGATAATCCAPATAATAAAAAAAG ATCAPACGCTTACTGATTTTGAGTTCATAATTGTCATTGATAATCCAAGTAGAGGTGATT TAATGGCAACATACAACGAACCAGAAAAATATTTAAAGGAATCTATTGAGTCAATTTYAA ттатстсссстататалсанссттталаттатствававаттсаставатстататтал CAGAGGAAATTATTAAAGAATATCAACAGAAAGATAAAAGAATTATTTTTATAAAAAATG TAAAGCAATTCTTAACAGAATATTCAGTTGTAGATAATAGAATAAAAATCTTGCTTAATG Conservative 17.9%; Score 168.4; DB 4; Pred. No. 1.1e-27; 5; Mismatches 281; Indels Length 1664976; 9 Gaps 76 475694 196 136 475754 475634 2

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RESULT 2
US-09-557-884-1
; Sequence 1, Application Us/v__
; Sequence 1, Application Us/v__
; Patent No. 6506581
; PATENT INFORMATION:
APPLICANT: Fleischmann et al.
APPLICANT: Fleischmann et al.
TTTT,E OF INVENTION: The Nucleotide sequence of the Haemophilus influenzae Rd Genome, Inhereof, and Uses Thereof
                                    TELEPAX: 301-309-8439
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1830121 base pairs
                                                                                                                              APPLICATION NUMBER: 08/476,102
FILING DATE: JUN-5-1995
ATTORNEY/AGENT INFORMATION:
NAME: Michelle 8. Marks
REGISTRATION NUMBER: 41,971
REFERENCE/DOCKET NUMBER: PB186F3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 301-309-8504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       475633 AAAGAAATTTAGGTAGAGGAGCCAGTAGAAATAAAGCTGTTAMTATAGCAAGGGGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: 3 1/2 inch diskette
COMPUTER: Dell Pentium
OPERATING SYSTEM: MS DOS v6.22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS: ADDRESSE: Human Genome Sciences,
STREET: 9410 Key West Avenue
                                                                                                                                                                                                                                                                                                                    PILING DATE: 25-Apr-2000
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
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                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/09/557,884
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ZIP: 20850
TYPE: nucleic acid
STRANDEDNESS: double
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US-09-643-990A-1
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TOPOLOGY: linear;
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-557-884-1
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Patent No. 6528289
GENERAL INFORMATION:
APPLICANT: Robert D. Fleischma
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Best Local Similarity 54.9
Matches 167; Conservative
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             MEDIUM TYPE: 3 1/2 inch diskette
COMPUTER: Dell Pentium
OPERATING SYSTEM: MS DOS v6.22
SOFTWARE: ASCII Text
CURRENT APPLICATION NUMBER: US/09/643,990A
FILING DATE: 23-Aug-2000
CLASSIFICATION EATA:
APPLICATION NUMBER: 08/487,429
APPLICATION NUMBER: 08/487,429
FILING DATE: 1995-06-07
APPLICATION NUMBER: 08/426,787
FILING DATE: 1995-04-21
ATTORNEY/ACENT INFORMATION:
NAME: KENLEY K. HOOVER
REFERENCE/DOCKET NUMBER: PB186P1C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1646365 GGATGCTGATGATATAGCTAAACCATCGTGGATTGAGAAAATAGTTACCTATCTGGAGAA 1646424
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ZIP: 20850
COMPUTER READABLE FORM:
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ADDRESSEE: Human Genome Scien
STREET: 9410 Key West Avenue
CITY: Rockville,
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 J. Craig Venter
J. Craig Venter
INVENTION: The Nucleotide sequence of
the Haemophilus influenzae
Thereof, and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Robert D. Fleischmann
Mark D. Adams
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hamilton O. Smith
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Pred. No. 5.6e-07;
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; Sequence 121, Application US/09453702B
; Patent No. 6365723
; GENERAL INFORMATION:
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Matches 167;
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Best Local
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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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                                                                  SOFTWARE: Word Perfect 8.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/453,702B
FILING DATB: 03-Dec-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                             ZIP: 53701-2113
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch. 1.44Mb storage
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                 APPLICATION NUMBER: 60/110,955
FILING DATE: 04-DEC-1998
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Quarles & Brady
STREET: 1 South Pinckney Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Blattner, Frederick R. Burland, Valerie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   150
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Similarity 54.9%;
67; Conservative
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TYPE: nucleic acid
STRANDEDNESS: double
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                                                                                                                                                                                                                                                                                           STATE: WI
                                                                                                                                                                                                                                                                                                           CITY: Madison
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R OF SEQUENCES: 265
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Seay,
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Pred. No. 5.6e-07;
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TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

SEQUENCE DESCRIPTION: SEQ ID NO: 121:
US-09-453-702B-121
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US-09-495-406-14
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                                                                                                                                                    NUMBER OF SEQ ID NOS: 35
SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 14
LENGTH: 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity Matches 175; Conserv
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Best Local
                                                                                                                                                                                                                                                                              APPLICANT: Gilbert, Michel
APPLICANT: Wakarchuk, Warren W.
APPLICANT: Wakarchuk, Warren W.
APPLICANT: National Research Council of Canada
TITLE OF INVENTION: Campylobacter Glycosyltransferases for
TITLE OF INVENTION: Gangliosides and Ganglioside Mimics
FILE REFERENCE: 019633-00011008
CURRENT APPLICATION NUMBER: US/09/495,406
CURRENT FILING DATE: 2000-01-31
                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/118,213 PRIOR FILING DATE: 1999-02-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 121:
NAME/KEY: CDS
LOCATION: (1)..(906)
OTHER INFORMATION: beta-1,3-galactosyltransferase from C.
OTHER INFORMATION: OH4384 (ORF 6a of LOS biosynthesis locu
                                                                                                     TYPE: DNA ORGANISM: Campylobacter jejuni
                                                                                            FEATURE:
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LENGTH: 14187
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    58 TCAGTAGAATCTATATTAAATCAAACGCTTACTGATTTTGAGTTCATAATTGTCATTGAT 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAATGGCCACGGGGAAATATATTTCTTTTTGTGATGCGGATGATTTGTGGCACGAGAAA 13623
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STRANDEDNESS: double
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Pred. No. 1.6e-06;
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             jejuni strain
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Query Match

Score 64.8;

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US-09-495-406-1/c
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Matches
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Best Local Similarity
Matches 172; Conserv
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SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 1
LENGTH: 11474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/09495406 Patent No. 6503744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Wakarchuk, Warren W.
APPLICANT: National Research Council of Canada
TITLE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis
TITLE OF INVENTION: Gangliosides and Ganglioside Mimics
FILE REFERENCE: 019633-000110US
CURRENT PEPLICATION NUMBER: US/09/495,406
CURRENT FILING DATE: 2000-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US PRIOR FILING DATE: 1999-02-01
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                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Campylobacter jejuni FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
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nes 172; Conservative
  5782
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                                     AAAATCTTGCTTAATGAAGAAAATATTGGTTTAGCATCAAGTTTGAACAAAGCGGTGAAA
                                                                              TGTGGAAATGATAATAGTATAAATATAGCCAAAGAATACTCTAAAAAAGACAAAAGAATA
                                                                                                                    CCAAGTAGAGGTGATTTAAAGCAATTCTTAACAGAATATTCAGTTGTAGATAATAGAATA 180
  <u>AAAATAATCCACAATGAAAAAACTTAGGTCTTTTAAGAGCAAGATATGAAGGTGTGAAA</u>
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0; Mismatches 157;
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Pred. No. 1.9e-05;
0; Mismatches 157;
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US-09-495-406-1
          Sequence 1, Application US/09495406
Patent No. 6503744
GENERAL INFORMATION:
APPLICANT: Gilbert, Michel
APPLICANT: Wakarchuk, Warren W.
APPLICANT: National Research Council of Canada
APPLICANT: INVENTION: Gampylobacter Glycosyltransferases for Biosynthesis
TITLE OF INVENTION: Gampylobacter Glycosyltransferases for Biosynthesis
TITLE OF INVENTION: Gampylobacter Glycosyltransferases for Biosynthesis
TITLE FERENCE: 019633-000110US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 11, Apparent No. 6503
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Best Local Similarity
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APPLICANT: Wakarchuk, Warren W.
APPLICANT: Wakarchuk, Warren W.
APPLICANT: Wakarchuk, Warren W.
APPLICANT: Wakarchuk, Warren W.
APPLICANT: National Research Council of Canada
TITLE OF INVENTION: Gampylobacter Glycosyltransferases for Biosynthesis
TITLE OF INVENTION: Gampylobacter Glycosyltransferases for Biosynthesis
FILE REFERENCE: 019633-000110US
CURRENT APPLICATION NUMBER: US/09/495,406
CURRENT FILING DATE: 2000-01-31
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR FILING DATE: 1999-02-01
NUMBER OF SEQ ID NOS: 35
CURRENT APPLICATION NUMBER:
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Pred. No. 2.
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2.1e-05;
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, OTHER INFORMATION: 11.5 kb PCR product from C. jejuni OH4384
, OTHER INFORMATION: including LOS biosynthesis locus
US-09-495-406-1
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US-09-134-000C-1681
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APPLICANT: Lynn Doucette-Stamm et al
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
TITLE OF INVENTION: ENTEROCOCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-032
CUBRENT APPLICATION NUMBER: US/09/134,000C
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/055,778
PRIOR FILING DATE: 1997-08-15
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PRIOR APPLICATION NUMBER: US 60/118,213
PRIOR FILING DATE: 1999-02-01
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1
LENGTH: 11474
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Best Local Similarity
Matches 138; Conserv
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                                                                                                                                                                                                                                                                                                                    Matches 151;
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   TGATTTAAAGCAATTCTTAACAGAATATTCAGTTGTAGATAATAGAATAAAAATCTTGCT
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Pred. No. 3.1e-05;
0; Mismatches 146;
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Pred. No. 3.1e-05.
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GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Gilbert, Michel

APPLICANT: Wakarchuk, Warren W.

APPLICANT: Mational Research Council of Canada

ITILE OF INVENTION: Campylobacter Glycosyltransferases for Biosynthesis of

ITILE OF INVENTION: Gangylobacter Glycosyltransferases for Biosynthesis of

ITILE OF INVENTION: Gangylobacter Glycosyltransferases

FILE REFERENCE: 019633-0001100S

FILE REFERENCE: 019633-0001100S

CURRENT APPLICATION NUMBER: US/09/495,406

CURRENT FILING DATE: 2000-01-31

PRIOR APPLICATION NUMBER: US 60/118,213

PRIOR APPLICATION ONMERR: US 60/118,213

PRIOR FILING DATE: 1999-02-01

NUMBER OF SEQ ID NOS: 35

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 16

LENGTH: 912
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; FEATURE:
; NAME/KEN: CDS
; LOCATION: (1)..(912)
; OTHER INFORMATION: Campylobacter glycosyltransferase B (cgtB) beta-1,3
; OTHER INFORMATION: galactosyltransferase from C. jejuni serotype O:2
; OTHER INFORMATION: (strain NCTC 11188)
US-09-495-406-16
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US-09-495-406-16
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Best Local (
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                                      301
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Similarity 51.2%;
                                                                                                                                                                                                                                                                                 TGTGGTAATGATAAAGTATAGATATAGCTAAAGAGTATGCTAGTAAAGATGATAGAATA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGAGTCAAATTTCCATCATACTACCAACTTATAATGTGGAAAAATATATTGCTAGAGCA
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TGCGAAGAATGTATTAAAATTTTGGA
                                      TTTGATAAGCAAATTCGTTTTATGGA 326
                                                                                       GTAGCAACTTCACCTTATATCATGTTTTTAGATTCTGATGATTATTTAGAACTTAATGCT
                                                                                                                                      ATTTCTAAGGGAGAATATATTTTTAGAATGGATGCTGATGATATTTCATATCCAAGTAGA
                                                                                                                                                                                      <u>AAAATCATACATAATGAAGAGAATTTAAAGCTTTTAAGAGCAAGATATGAAGGTGCTAAA</u>
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Pred. No. 0.00011;
0; Mismatches 156;
323
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RESULT 11 US-09-134-000C-1682

Sequence 1682,

Application US/09134000C

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RESULT 12
US-08-961-527-155/c
; Sequence 155, Application US/08961527
; rant No. 6420135
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US-09-134-000C-1682
                                                                                                                                                                                                                                                                                                 Patent No. 6420135
GENERAL INFORMATION:
APPLICANT: Charles Kunsch
TITLE OF INVENTION: Streptococcus
NUMBER OF SEQUENCES: 391
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
TITLE OF INVENTION: ENTEROCOCCUS FASCALIS FOR DIAGNOSTICS AND THERAPBUTICS
FILE REFERENCE: 032796-032
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/055,778
PRIOR APPLICATION NUMBER: US 60/055,778
PRIOR FILING DATE: 1997-08-15
NUMBER OF SEQ ID NOS: 6812
SOFTMARE: PATENTIN VETSION 3.1
SEQ ID NO 1682
LENGTH: 1602
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GENERAL INFORMATION:
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Best Local
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                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch
COMPUTER: HP Voctra 486/33
OPERATING SYSTEM: MSDOS version
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
                                               CLASSIFICATION: 424
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                            STREET: 9410 Key West Avenue
CITY: Rockville
                                                                             FILING DATE:
                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                              COUNTRY:
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                                                                                                 US/08/961,527
                                                                                                                                                                           3.50 inch, 1.4Mb storage
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RESULT 13
US-08-487-826B-13/c
; Sequence 13, Application US/08487826B
· Patent No. 5993827
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Best Local
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INFORMATION FOR SEQ ID NO::
SEQUENCE CHARACTERISTICS:
LENGTH: 6474 base pairs
TYPE: nucleic acid
TYPE: nucleic Acid
TYPE: Acid
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
tes 303; Conserv
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4724
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                                 701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44 ATTATGTGAGAGATTCAGTAGAATCTATATTAAATCAAACGCTTACTGATTTTGAGTTCA
                                                                                                                                                                                                                                            AGAĀAATĀGATTČACATCĀGGĀCGGTGTTGTTTĀTTĀĀAĀCTĀCTTGTTCAĀGGATĀCC
                                                                                                                                                                                                                                                                                 GAGATTTAGTACCTGTTGAAGATTATGATTTTGCAATAAGAGGAGCTCTGGCTGATTTCA
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                                   AATCTTATATT
                                                                           TCACTGGAGTGACACAAAAAACAATTAATGCAGATGAAGAATATTATAATTACTGTAGGA
                                                                                                                                                          AAATTGATATAGTGCGAGAATTCTTGGTGAATTACTACGCTCACAGTAAAGAAAACGGTA
                                                                                                                                                                                                  AAATCGGCTTACTCAATAAAGTACTTTTACAGTATAGATTAAACGAGAATGGAATATCAC
                                                                                                                                                                                                                                                                                                                              GAGAAAGTAATAAAATATACTTAACTAATGATATACGGAAGATGTTATTGAATAGATCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTTCTCAGCAACTCTAATAGAATTGATAGACCAAAAAGGAAATTTAGTATAATAAACAAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAATTTAGC-----TTTAGTTTGTAGTTATGGAATAATAATTTATCCAAATGGTACAC
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                                                                                                                  AAACCAATAAGTTTAAGCAATATATTTACTCAGCTATTTTACAAGATTTTTATAAAGAAA
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ilarity 45.2%;
Conservative
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Pred. No. 0.00039;
0; Mismatches 359;
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HYPOTHETICAL:
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOPTWARE: PatentIn Release #1.0, Version #1.25
CUREBUT APPLICATION DATA:
APPLICATION NUMBER: US/08/487,826B
FILING DATE: 10-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 19124 base pairs TYPE: nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
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                                                                                                                                                                       18281
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LE OF INVENTION: BINDING DOMAINS FROM PLASMODIUM VIVAX
LE OF INVENTION: AND PLASMODIUM FALCIPARUM ERYTHROCYTE BINDING PROTEINS
                                 18161
                                                                                                                                                                                                                                          18341
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367 ATAGACCAAAAAGGAAATTTAGTATATAAACAACGAGAAAGTAATAAAATATACTTAACT 426
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                      CAAGAAATATTATTGTATATTATATTTAATTTTAATAGGAAACTATATAATATTGTA 18162
                                                                                                                                   GAGAATATATTTTAGAATGGATGCTGATGATATTTCATATCCAAGTAGAT----TTGAT
                                                                                                                                                                       GAÄÄTTÄÄAÄÄGGAÄTAAAGTTÄAATÄÄÄATÄAGÄÄÄTTÄGTTATATTÄTÄÄÄÄÄATÄÄ 1822
                                                                                                                                                                                                      TTAATGAAGAAAATATTGGTTTAGCATCAAGTTTGAACAAAGCGGTGAAAATTTCTAAGG 250
                                                                                                                                                                                                                                                                           GTGATTTAAAGCAATTCTTAACAGAATATTCAGTTGTAGATAATAGAATAAAAATCTTGC 190
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Miller, Louis H.
Miller, David S.
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Knobbe Martens Olson & Bear
Knobbe Martens Orive 16th Floor
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Pred. No. 0.0013;
0; Mismatches 459;
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Patent No. 5
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                                 TELEFAX: (619) 235-0176
INFORMATION FOR SEQ ID NO:
 SEQUENCE CHARACTERISTICS:
LENGTH: 19124 base pai
                                                                                      NAME: Israelsen, ned REGERTATION NUMBER: 29,655
REGERENCE/DOCKET NUMBER: NIH121.001CP1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                          CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
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                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                 APPLICATION NUMBER: US/0 FILING DATE: 10-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
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E: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATTTTGCAATAAGAGGAGCTCTGGCTGATTTCAAAATCGGCTTACTCAATAAAGTACTT 606
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620 Newport Center Drive 16th Floor
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Miller, Louis H.
Peterson, David S.
Su, Xin-zhaun
19124 base pairs
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                                                                        (619) 235-8550
                                                                                                                                                                                                                                                                                                         Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , Thomas E.

BINDING DOMAINS FROM PLASMODIUM VIVAX
AND PLASMODIUM FALCIPARUM ERYTHROCYTE
                                                                                                                                                                                                                     US/08/487,826B
                                     13:
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RESULT 15
US-08-998-416-534/c
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Sequence 534, Application US/08998416 Patent No. 6239264 GENERAL INFORMATION:
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TOPOLOGY: linea
MOLECULE TYPE: CD:
HYPOTHETICAL: NO
ANTI-SENSE: NO
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Similarity 42.5%;
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                                                                                                                                                                                                                                                                                                                                                ATATATATATATATATACCCATAACTACATACATATATACATTAACAAACACATATATAA 1615
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGAAACGCTATACTCAGCAAGAGCTCTCTAAATATTTTGAGCTAAAATCTACCCCTAG 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGAAAAT-CTTATATTGATATCACAAAAATTACTAATTACTTTCAAGAGTATGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATCACAAACCAATAAGTTTAAGCAATATATTTACTCAGCTATTTTACAAGATTTTTAT 693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATTTCAAAATCGGCTTACTCAATAAAGTACTTTTACAGTATAGATTAAACGAGAATGGA 633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGATATAGAGATTTAGTACCTGTTGAAGATTATGATTTTGCAATAAGAGGAGCTCTGGCT 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u> АААРАААААААТАТАТАТСАТААААРАСАААРААВААGAAPAPAATATATTABAATAT</u> 15736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>AAACAACGAGAAAGTAATAAATATACTTAACTAATGATATACGGAAGATGTTATTGAAT</u>
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Pred. No. 0.0021;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 24-DEC-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: CH 0016/9
PTINING DATE: 31-DEC-1996
AFFORMEY/AGENT INFORMATION:
NAME: Weigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1010-641-8587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patence...
SOFTWARE: PATENCE...
CURRENT APPLICATION DATA:
CAPPLICATION NUMBER: US/08/.
APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLI
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 854 base pairs
TYPE: nucleic acid
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ORIGINAL SOURCE:
ORGANISM: PAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PATENT PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Rebischung, Corinne
TITLE OF INVENTION: GENOMIC DNA SEQUI
TITLE OF INVENTION: AND USES THEREOF
NUMBER OF SEQUENCES: 1152
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STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: No. 6239264th Carolina
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            340 GATTICICAGCAACTCIAATAGAATIGATAGACCAAAAAGGAAATITAGTATATAAACAA 399
                                                                                                                                                                                                                                                                                                                                                                                                             161
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                                                                                                       TATAATTTAATTTATATAATTATTTÄÄTTTÄCTTCATTGATATATTAATTATTAAATG
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Knechtle, Philipp
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Steiner, Sabine
Mohr, Christine
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches 320;
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Search Job tir	g	δ	망	δ	g	Ş	В	\$	Дb
Search completed: March 28, 2004, 07:33:01 Job time : 119 secs	110 AATATATCATTATTAAATGGTAATTATTAATAATTATCTTTAATGA 64	580 AAAATCGGCTTACTCAATAAAGTACTTTTACAGTATAGATTAAACGA 626	170 AAATTATTAATTAGTAAATTATATTTATTTATTTATTAACATAATTTTTTGATAAT 111	520 AGAGATTTAGTACCTGTTGAAGATTATGATTTTGCAATAAGAGGAGCTCTGGCTGATTTC 579	230 AAATCTAATAATTTATTATCTAAAGTATATAATTAATTAA	460 ATACTTGCCCACCCAACGTGGTGCGTAAAAAAGAAAGTTTTCGATAAGTTAATGGGATAT 519	289 TTAATTGGATATTACTACCTACTAAATATTTACCTA-ATAATATATTAATTA	400 CGAGAAAGTAATAAATATACTTAACTAATGATATACGGAAGATGTTATTGAATAGATCT 459	349 TACCTTTCATAATATTTATTTATTAGTCTAGTAATATTTCTATTTAATAGTCTACCCT 290